

REMARKS

Applicants respectfully request reconsideration of the present application, as amended.

I. STATUS OF THE CLAIMS

Claims 1, 2, 4-32 and 56 are pending in this application. Claims 21-32 have been canceled herewith without prejudice.

No new matter has been added by virtue of this amendment.

II. OBJECTION TO THE CLAIMS

Claim 1 has been objected to on the grounds that the recitation of "a sealant heat-treating unit..." is drawn to a non-elected invention.

In response, Applicants note that the same exact objection to claim 1 was made in a previous Office Action dated September 8, 2005 and subsequently withdrawn by Examiner in an Office Action dated February 28, 2006. In this regard, the Examiner's attention is directed to page 2 of Office Action dated February 28, 2006 in which he already withdrew the above objection to claim 1.

Thus, removal of the above objection to claim 1 is respectfully requested.

III. 35 U.S.C. 103(a) REJECTIONS

Claims 1, 2, 4-20 and 56 have been rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,978,065 to Kawasumi et al. ("the Kawasumi patent") in view of Japanese Patent Application Publication No. JP56114928A to Adachi ("the Adachi publication").

In order to establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. (See MPEP 2143.03; In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974)).

However, the combination of Kawasumi and Adachi fails to teach or suggest all of the features recited in claim 1. In particular, the Kawasumi and Adachi combination at the very least fails to teach or suggest a substrate-attaching unit receiving the two substrates from the sealant-applying unit or the liquid crystal depositing unit and conjoining the substrates in a vacuum state, as recited in claim 1. In addition, the Kawasumi and Adachi combination also at the very least fails to teach or suggest an in-line convey unit conveying the substrates in the in-line system.

First of all, Applicants submit that the primary reference cited, i.e., the Kawasumi reference, expressly teaches away from the use of vacuum conditions and equipment for the manufacture of liquid crystal displays (LCDs). It is well known that under the U.S. patent laws, when a prior art reference or references teaches away or leads away from a claimed invention, obviousness may be rebutted. (See MPEP 2145).

In this regard it is respectfully submitted that the Examiner's interpretation in the instant Office Action in concluding that Kamasumi teaches a substrate attaching unit conjoining substrates in a vacuum is clearly erroneous. Although Kawasumi may mention vacuum conditions for manufacturing liquid crystal display (LCDs) in conjunction with describing other conventional processes, Kawasumi does so only for the purpose of teaching away from their use in manufacturing LCDs. Instead, it is clear that a primary objective of Kawasumi is to have LCD manufacturing processes which avoid the use of vacuum conditions altogether. The above statement is evidenced by the fact that Kawasumi only discusses what it perceives to be disadvantages associated with using vacuum conditions in manufacturing LCDs and also by the fact that none of the embodiments described in Kawasumi utilize vacuum conditions. For example, in Kawasumi it is stated throughout that

using vacuum conditions results in "...long manufacturing time and high cost." (See **Col. 1, lines 26-50 and Col. 7, lines 4-7 of the Kawasumi patent**). Moreover, Kawasumi states that with its LCD manufacturing processes, the need for using vacuum apparatuses or vacuum conditions is no longer necessary and thus manufacturing costs may be kept low. (See **Col. 7, lines 4-7 and Col. 21, lines 30-32 of the Kawasumi patent**).

Furthermore, Applicants respectfully disagree with the Examiner's statement that Kawasumi mentions that the use of vacuum conditions provides suitable LCD though more costly manufacturing conditions and affords better degasification of liquid crystal material. Rather, there does not appear to be any mention in Kawasumi whatsoever of any beneficial results stemming from the use of vacuum condition in manufacturing LCDs. On the contrary, Kawasumi, as mentioned above, only discusses disadvantages associated with using vacuum conditions in manufacturing LCDs and also states that its processes provide a cost effective replacement for those LCD manufacturing processes which utilize vacuum conditions. (See again **Col. 1, lines 26-50, Col. 7, lines 4-7 and Col. 21, lines 30-32 of the Kawasumi patent**).

Thus, as can be gleaned from the above, the teachings of Kawasumi clearly discourage and teach away from using vacuum conditions in manufacturing LCDs. Furthermore, the Adachi publication fails to cure the above deficiency of the Kawasumi patent but rather is completely silent regarding a substrate-attaching unit receiving two substrates from a sealant-applying unit or a liquid crystal depositing unit and conjoining the substrates in a vacuum state as essentially recited in claim 1.

Therefore, for at least the reasons discussed, one skilled in the art, when combining the teachings of Kawasumi with Adachi, would clearly be led away from providing a LCD manufacturing process which included a substrate-attaching unit receiving the two substrates from the sealant-applying unit or the liquid crystal depositing unit and conjoining the substrates in a vacuum state as recited in claim 1.

As a result, the Kawasumi and Adachi combination at the very least fails to teach or suggest providing the above-mentioned substrate attaching unit feature, as recited in claim 1.

In addition, as mentioned above, the combination of Kawasumi with Adachi also at the very least fails to teach or suggest an in-line convey unit conveying the substrates in an in-line system, as essentially recited in claim 1. As conceded by the Examiner, Kawasumi fails to teach or suggest an in-line conveying unit. **(See page 5 of the February 28, 2006 Final Office Action)**. Moreover, the combination of Adachi with Kawasumi fails to cure the above deficiency of the Kawasumi reference because contrary to the Examiner's apparent characterization of the belt conveyor 1 feature described in Adachi as being the same or equivalent feature as the in-line conveying unit feature recited in claim 1, these features are really distinct structurally from one another and thus are not the same features.

For example, an exemplary embodiment of the present invention illustrates in-line convey units 1110, 1120, 1120, 1140, 1150, 1170 and 1180 which are within the scope of claim 1. **(See page 6, lines 6-20 and Fig. 3 of the present specification)**. Clearly, the belt conveyor 1 of Adachi does not have the same structure and thus is not the same feature as the in-line convey unit conveying the substrates in the in-line system, as recited in claim 1. Thus, the combination of Kawasumi with Adachi also at the very least fails to teach or suggest an in-line convey unit conveying the substrates in an in-line system, as essentially recited in claim 1.

Therefore, for at least the reasons set forth above, withdrawal of the rejection to claim 1 is therefore requested. As claims 2, 4-20 and 56 depend from and incorporate all of the limitations of claim 1, withdrawal of the rejection to these dependent claims is likewise requested. Applicant also reserves the right to address any individual rejections of the dependent claims should such be necessary or appropriate.

IV. CONCLUSION

For the foregoing reasons, applicants respectfully submit that the instant application is in condition for allowance. Early notice to that end is earnestly solicited.

If a telephone conference would be of assistance in furthering prosecution of the subject application, applicants request that the undersigned be contacted at the number below.

Respectfully submitted,



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